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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/735,946	12/14/2003	Jeffrey D. Davies	111803.P002	3727

7590 06/06/2006  
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EXAMINER
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SMITH, MATTHEW J

ART UNIT	PAPER NUMBER
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3672

DATE MAILED: 06/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Applicant No.

10/735,946

Applicant(s)

DAVIES, JEFFREY D.

Examiner

Matthew J. Smith

Art Unit

3672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 March 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 15-21, 23-27 and 29-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-21, 29-38, 42 and 43 is/are allowed.
- 6) ☒ Claim(s) 23-27 and 39-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the mud rotary drilling (claim 39) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 27 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

This claim recites the drill motor as being both coupled (line 4) and decoupled (line 8), which is indefinite.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 23, 24, 27, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vogel (2576199) in view of Wright et al. (5950741)

Vogel discloses a means for propelling or tractor 78; means 98 for orienting and controlling a drill motor 10 coupled with the tractor; means 24, 34 for drilling; and the motor powered by and decoupled from the tractor but not an all terrain vehicle (ATV).

Wright et al. present the advantages of having a core-sampling drilling device on an ATV as opposed to a tractor (col. 2, lines 18; 53).

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It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use an ATV instead of a tractor, as presented by Wright et al., in order to efficiently and inexpensively drill (Wright et al., col. 2, lines 22-23).

Regarding claim 24, it would also have been obvious to drill a core sample, as also presented by Wright et al., in order to obtain a core rather than drill a posthole since the motor could have powered either device.

Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vogel in view of Wright et al. as applied to claim 27 above, and further in view of Nosewicz et al. (5211248).

The combination discloses a drill motor powered and decoupled from an ATV but not a sample tube.

Nosewicz et al. depict drilling into the earth with a sample tube residing within a hollow drill bit 150.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to substitute the combined sampling device with the Nosewicz et al. sampling device, in order to core.

Art Unit: 3672

Claims 26 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vogel in view of Wright et al. as applied to claim 27 above, and further in view of Henson (4081040).

The combination discloses a drill motor powered and decoupled from an ATV but not a sample tube with an impact hammer.

Henson describes a sample tube 69 that resides within the drill bit 21 while the drill bit is turning, such that the hole is bored with the sample tube contained within the drill bit.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to substitute the combined sampling device with the Henson sampling device in order to core.

Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vogel in view of Wright et al. as applied to claim 27 above, and further in view of Coast et al. (6234260).

The combination discloses a drill motor powered and decoupled from an ATV but not a mud rotary drill.

Coast et al. show a rotary drill 22 on a vehicle 11 that uses water and the earth in place (creating mud) to bore a hole.

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It would have been obvious to a person having ordinary skill in the art at the time the invention was made to drill with a mud rotary drill device, as shown by Coast et al., in order to create a borehole.

***Allowable Subject Matter***

Claims 15-21, 29-38, 42, and 43 are allowed.

***Response to Arguments***

Applicant's arguments, see page 17, filed 16 March 2006, with respect to the rejections of claims 1-14, 22, and 28 under 35 U.S.C. 102 and 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new rejection is made in view of Vogel. Vogel discloses a drilling device detached from but powered by the vehicle power take-off 76. While Vogel does not use the term motor, the gearing does impart motion to the auger 24.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J. Smith whose telephone number is 571-272-7034. The examiner can normally be reached on T-F, 9-4.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David Bagnell  
Supervisory Patent Examiner  
Art Unit 3672

MJS *MJS*  
17 May 2006